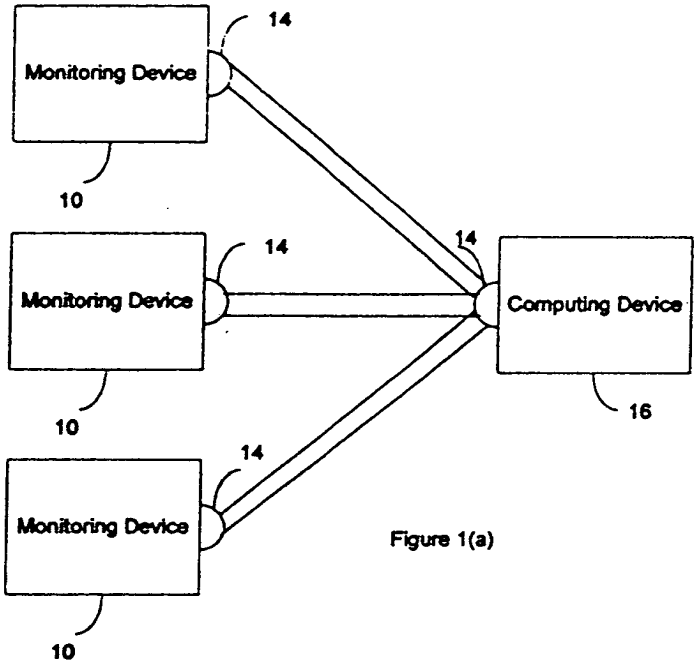

Figure 1(a)

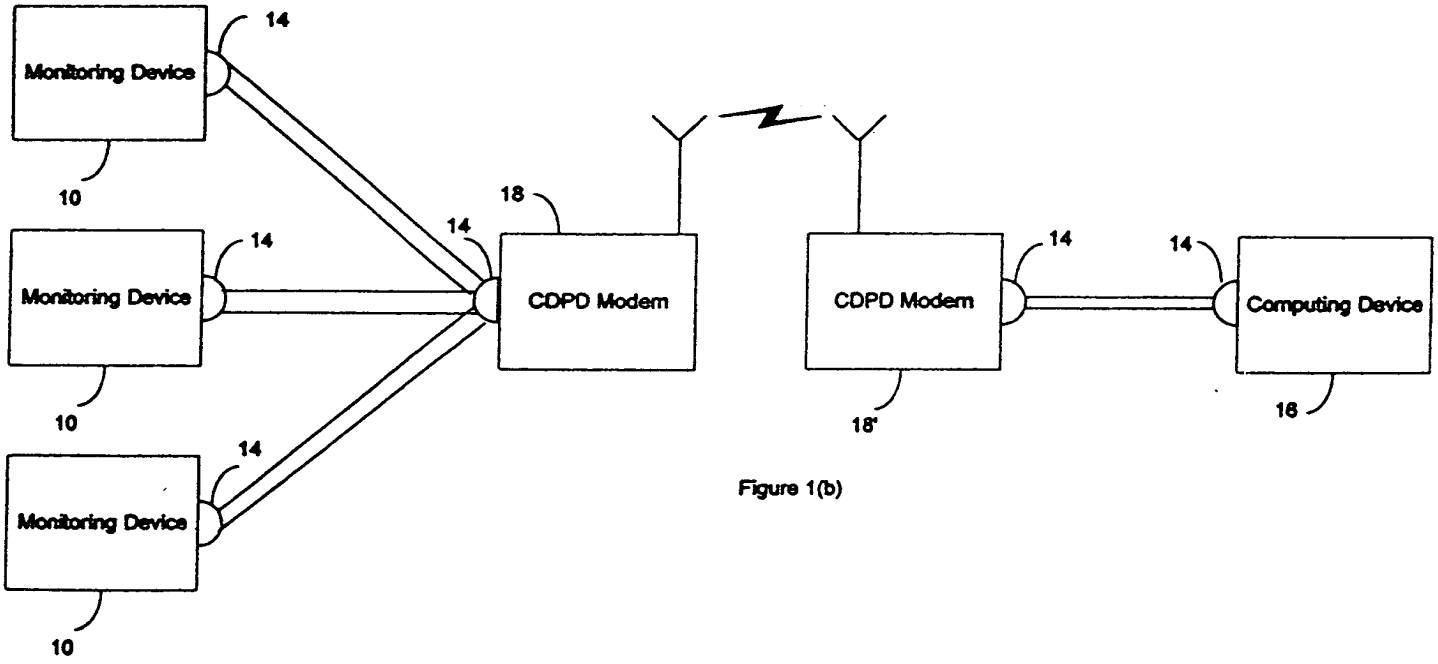

Figure 1(b)

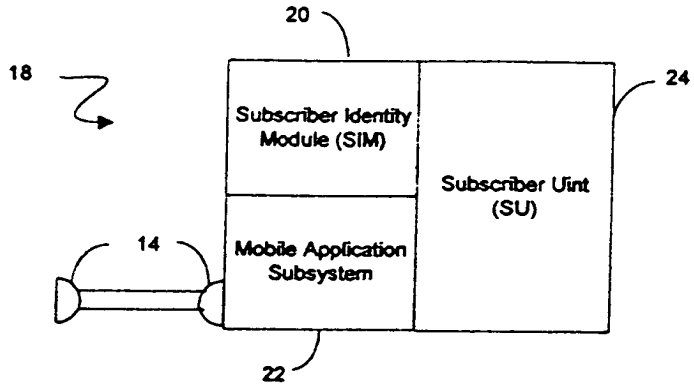

Figure 2

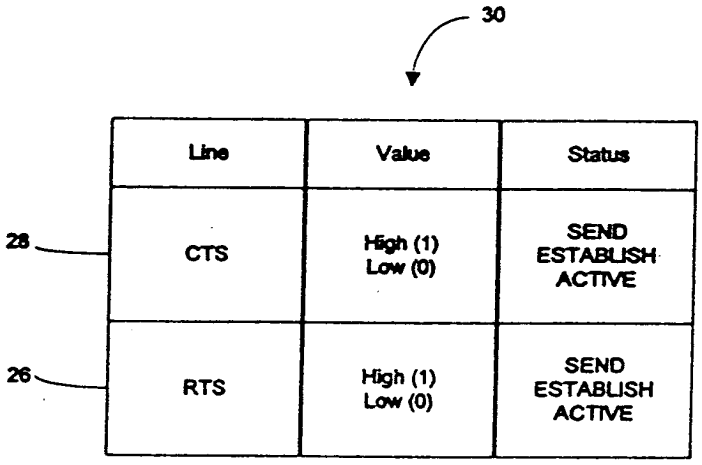

Figure 3

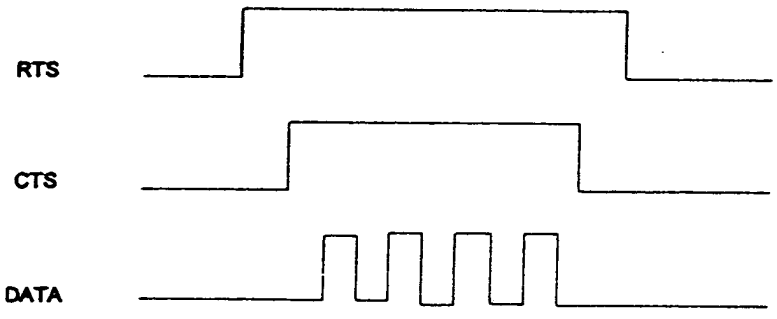

Figure 4

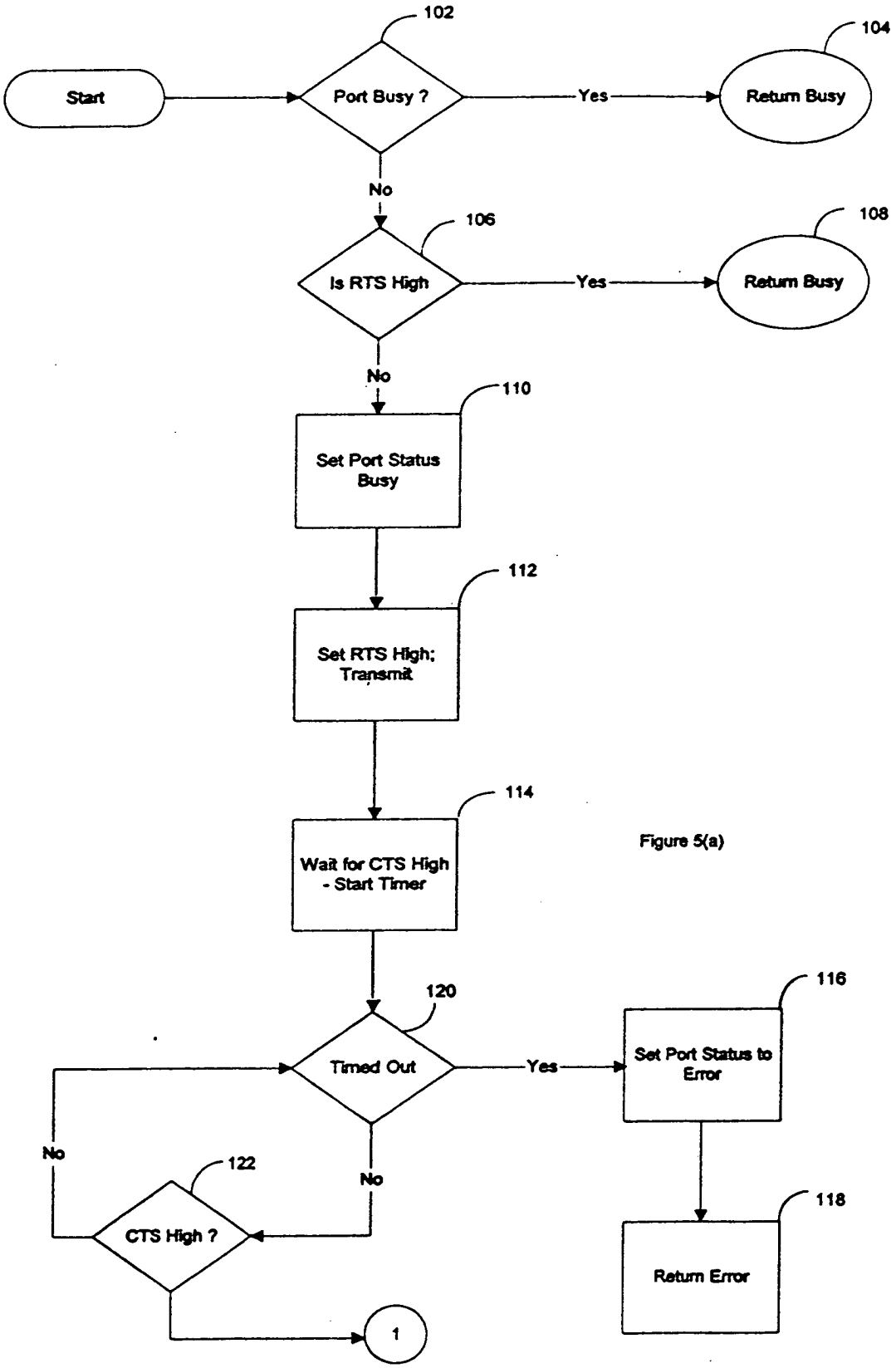
Start
Port Busy ?
102
Yes
Return Busy
104
No
Is RTS High
106
Yes
Return Busy
108
No
Set Port Status Busy
110
Set RTS High; Transmit
112
Wait for CTS High - Start Timer
114
Timed Out
120
Yes
Set Port Status to Error
116
No
No
CTS High ?
122
Return Error
118
1

Figure 5(a)

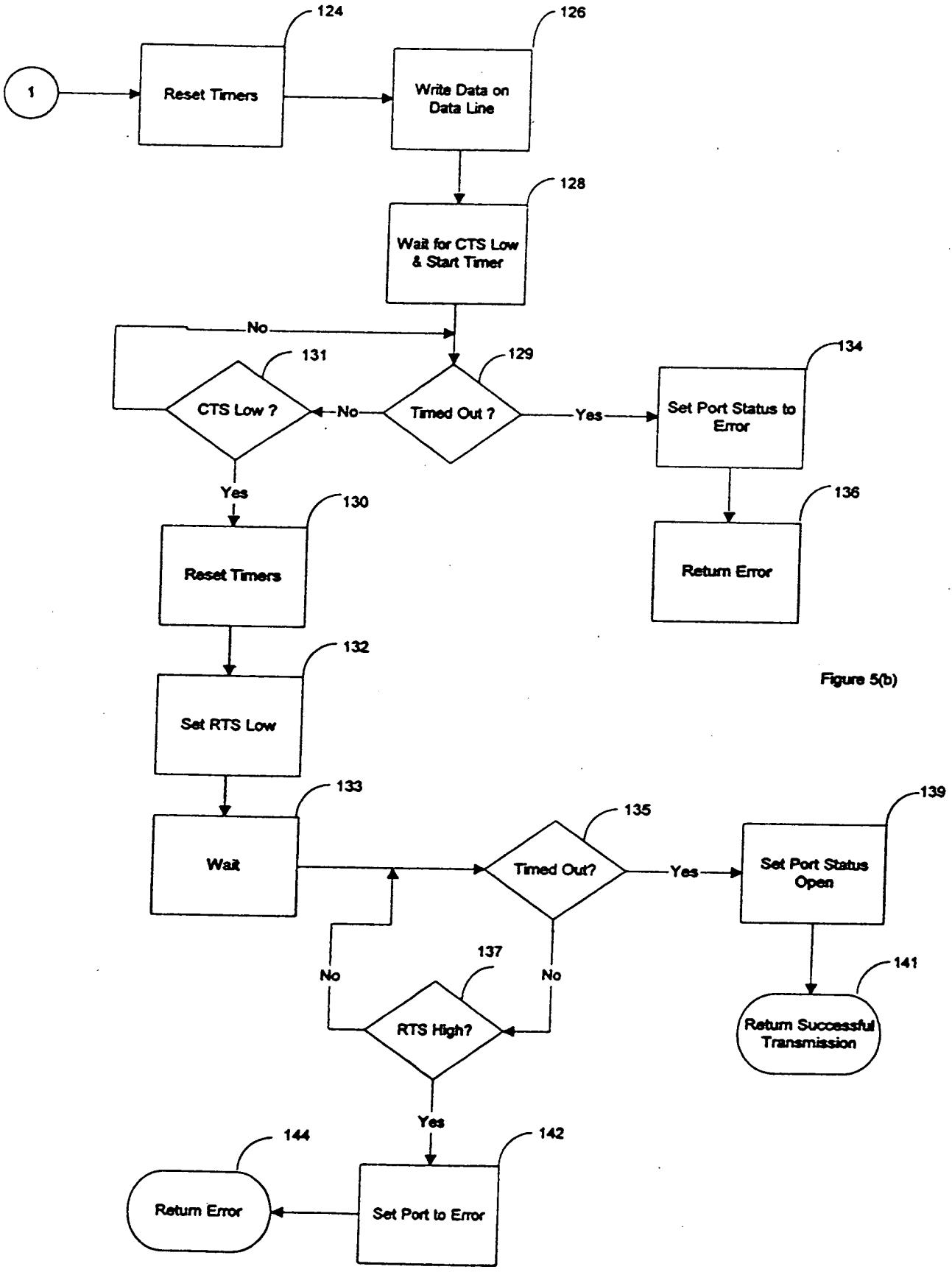
1
Reset Timers
124
Write Data on Data Line
126
Wait for CTS Low & Start Timer
128
No
CTS Low ?
131
No
Timed Out ?
129
Yes
Set Port Status to Error
134
Yes
Reset Timers
130
Return Error
136
Set RTS Low
132
Wait
133
Timed Out?
135
Yes
Set Port Status Open
139
No
No
RTS High?
137
Return Successful Transmission
141
Yes
Return Error
144
Set Port to Error
142

Figure 5(b)

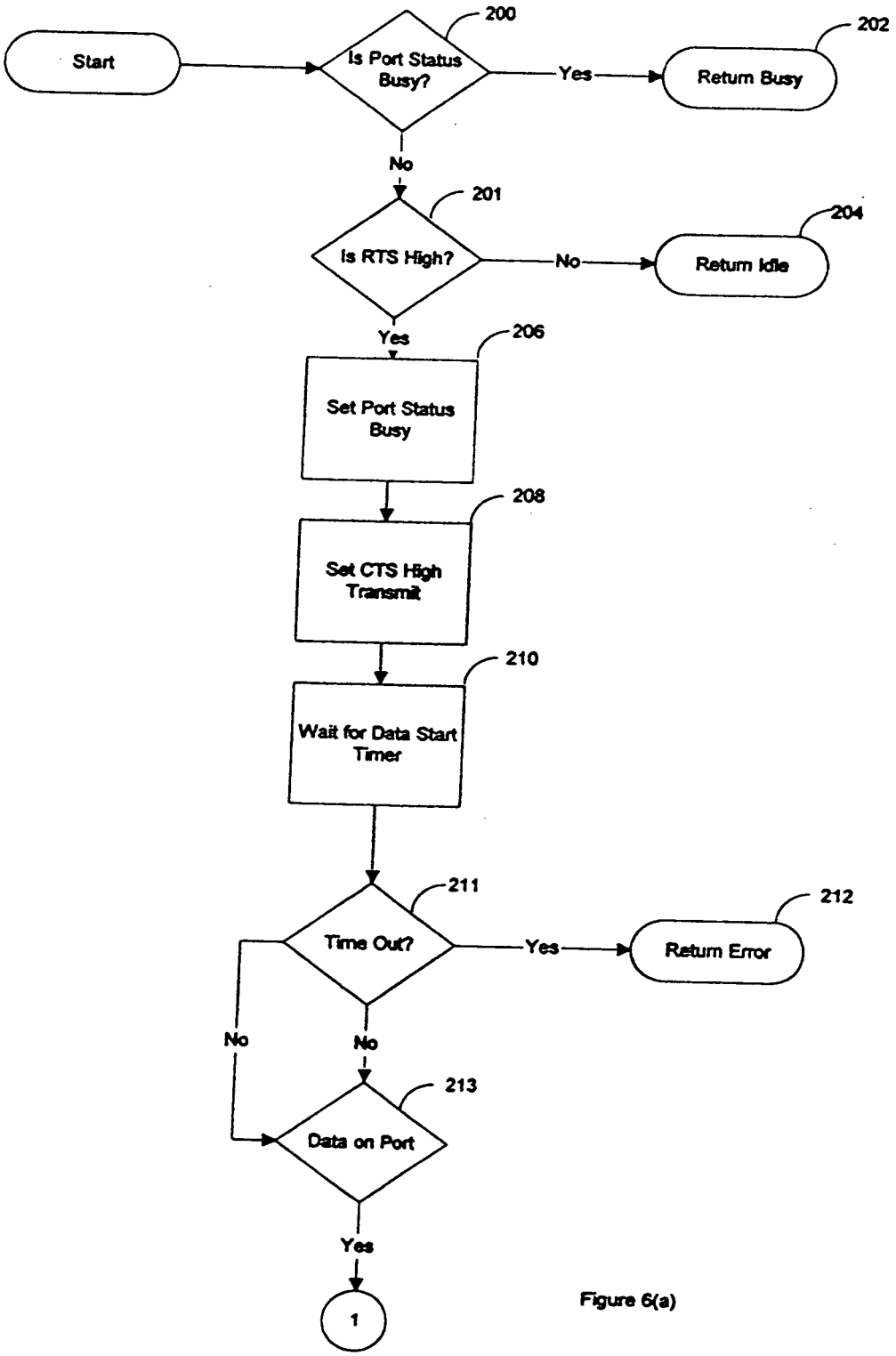
Start
Is Port Status Busy?
200
Yes
Return Busy
202
No
Is RTS High?
201
No
Return Idle
204
Yes
Set Port Status Busy
206
Set CTS High Transmit
208
Wait for Data Start Timer
210
Time Out?
211
Yes
Return Error
212
No
No
Data on Port
213
Yes
1

Figure 6(a)

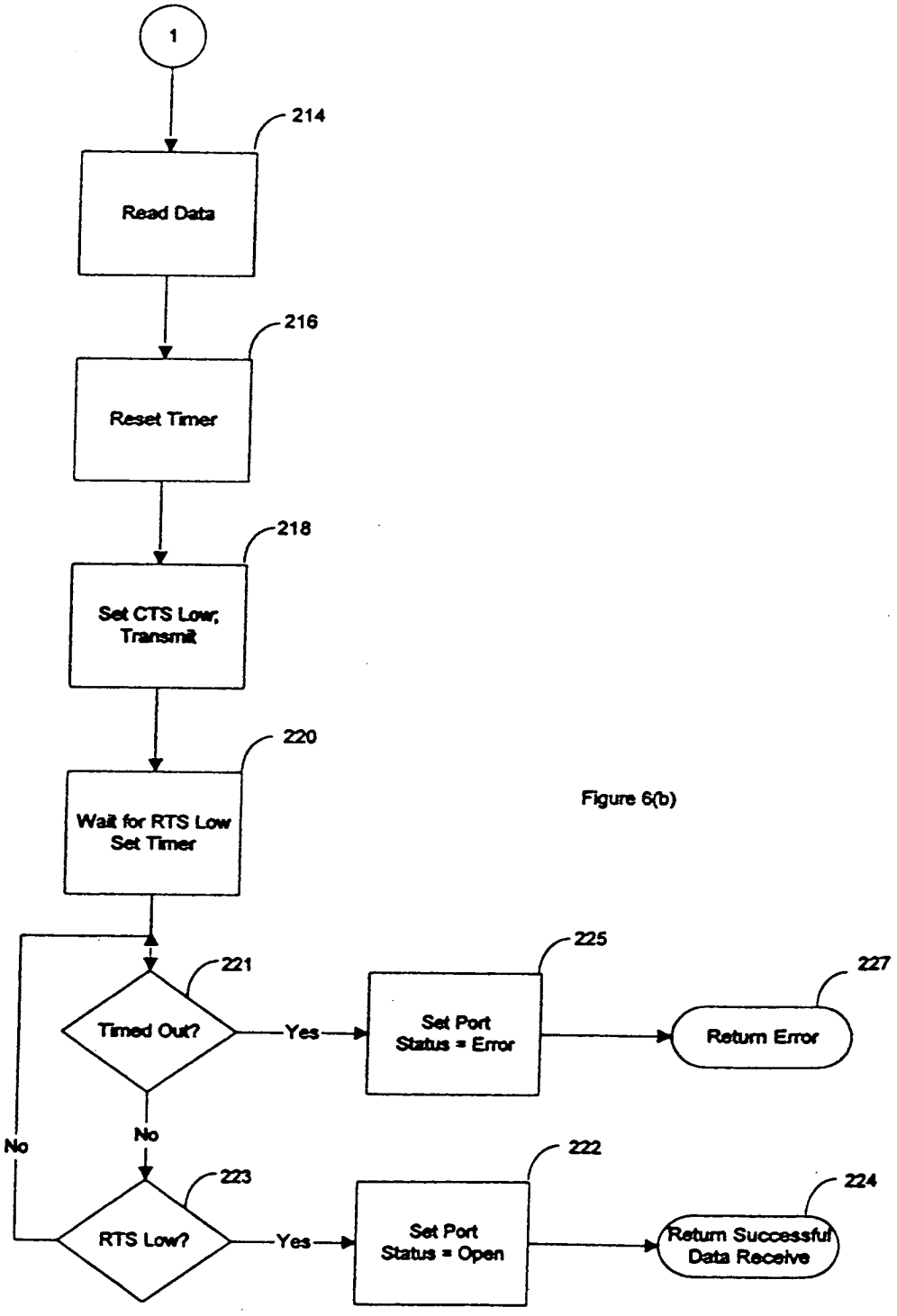
1
214
Read Data
216
Reset Timer
218
Set CTS Low;
Transmit
220
Wait for RTS Low
Set Timer
221
Timed Out?
Yes
225
Set Port
Status = Error
227
Return Error
No
No
223
RTS Low?
Yes
222
Set Port
Status = Open
224
Return Successful
Data Receive

Figure 6(b)

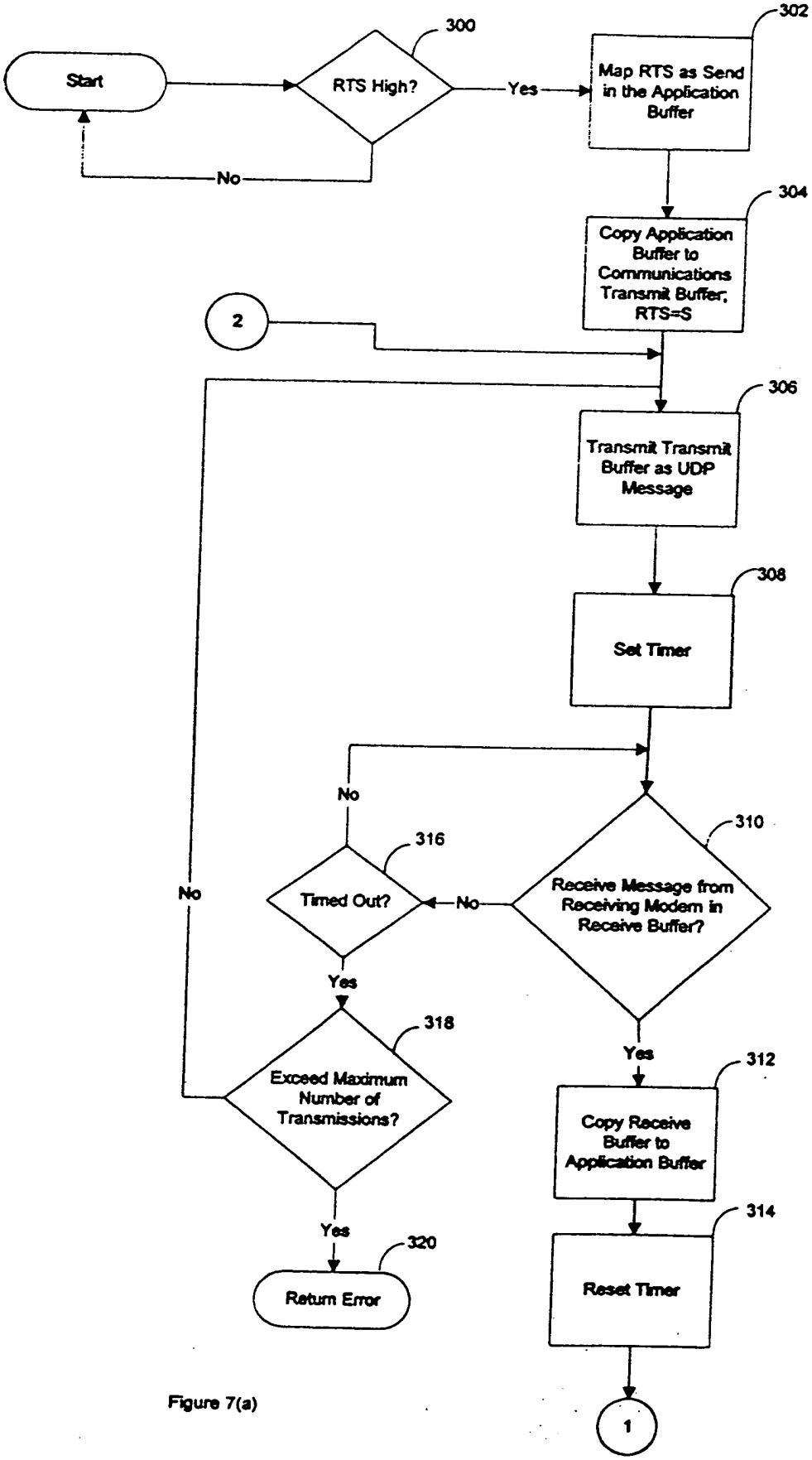
Start
RTS High?
300
Yes
No
Map RTS as Send in the Application Buffer
302
Copy Application Buffer to Communications Transmit Buffer; RTS=S
304
2
Transmit Transmit Buffer as UDP Message
306
Set Timer
308
No
Receive Message from Receiving Modem in Receive Buffer?
310
Timed Out?
316
No
No
Yes
Exceed Maximum Number of Transmissions?
318
Yes
Copy Receive Buffer to Application Buffer
312
Reset Timer
314
Return Error
320
1

Figure 7(a)

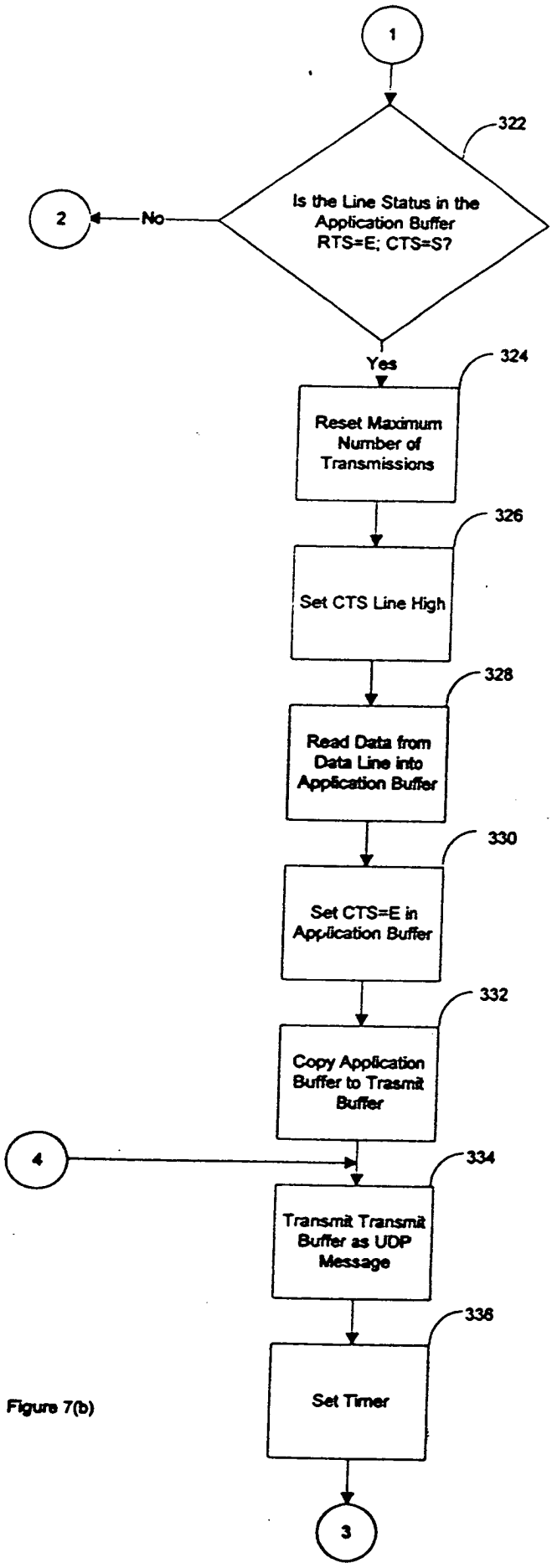
1
322
Is the Line Status in the Application Buffer RTS=E; CTS=S?
2
No
Yes
324
Reset Maximum Number of Transmissions
326
Set CTS Line High
328
Read Data from Data Line into Application Buffer
330
Set CTS=E in Application Buffer
332
Copy Application Buffer to Trasmit Buffer
4
334
Transmit Transmit Buffer as UDP Message
336
Set Timer
3

Figure 7(b)

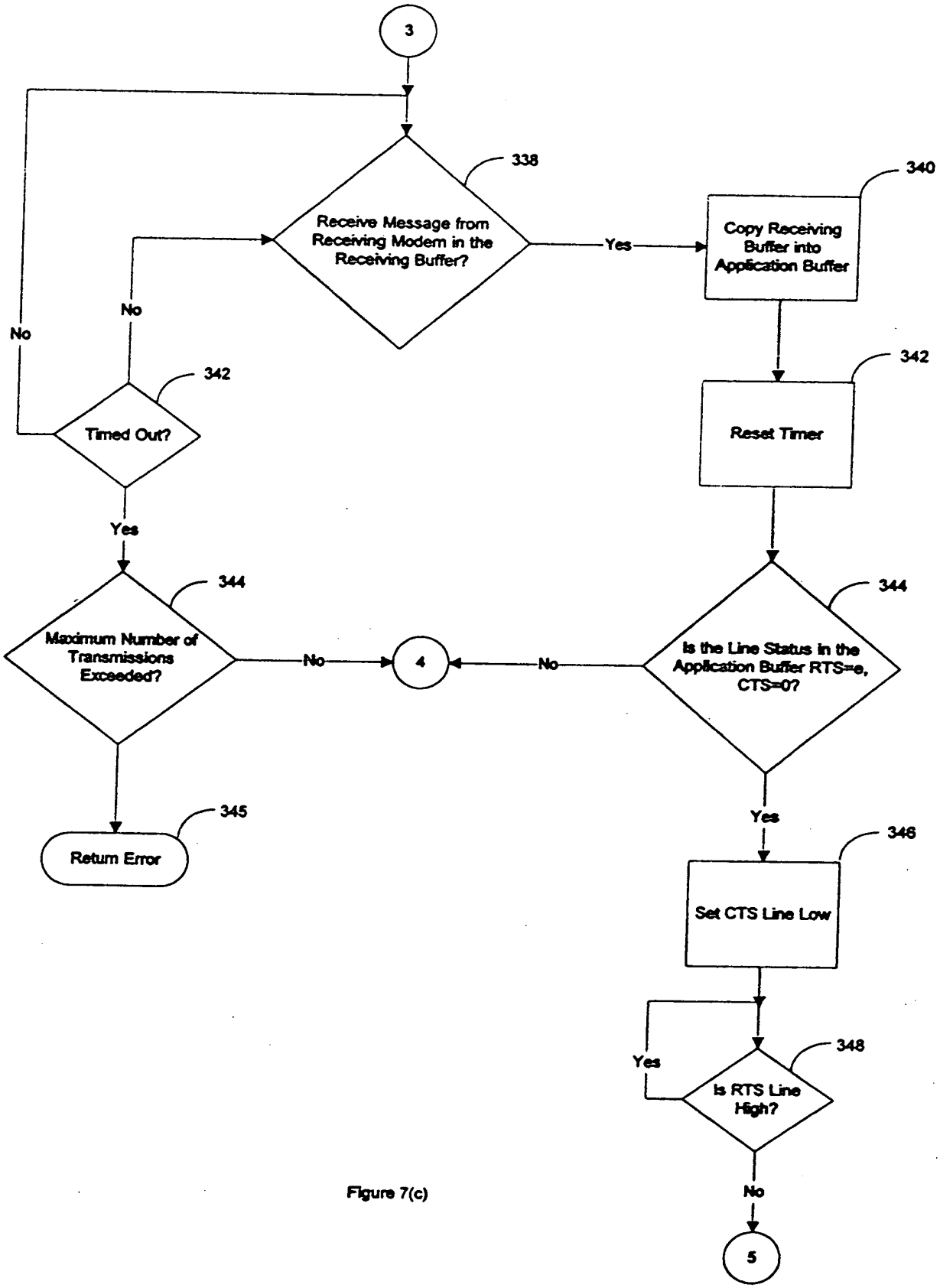
3
338
Receive Message from Receiving Modem in the Receiving Buffer?
Yes
340
Copy Receiving Buffer into Application Buffer
No
No
342
Timed Out?
342
Reset Timer
Yes
344
Maximum Number of Transmissions Exceeded?
No
4
No
344
Is the Line Status in the Application Buffer RTS=e, CTS=0?
345
Return Error
Yes
346
Set CTS Line Low
Yes
348
Is RTS Line High?
No
5

Figure 7(c)

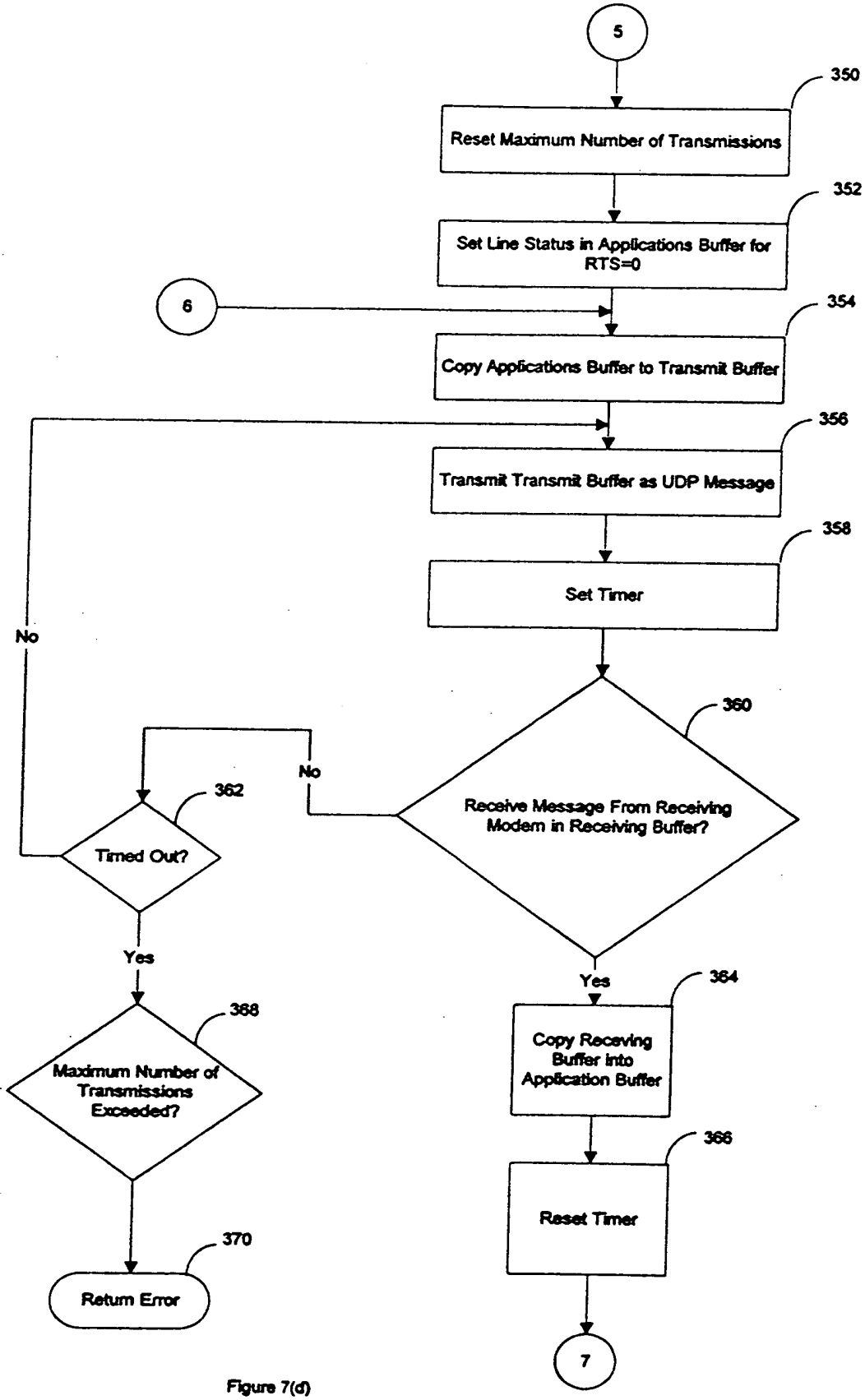
5
350
Reset Maximum Number of Transmissions
352
Set Line Status in Applications Buffer for RTS=0
6
354
Copy Applications Buffer to Transmit Buffer
356
Transmit Transmit Buffer as UDP Message
358
Set Timer
360
Receive Message From Receiving Modem in Receiving Buffer?
No
362
Timed Out?
No
Yes
368
Maximum Number of Transmissions Exceeded?
370
Return Error
Yes
364
Copy Receving Buffer into Application Buffer
366
Reset Timer
7

Figure 7(d)

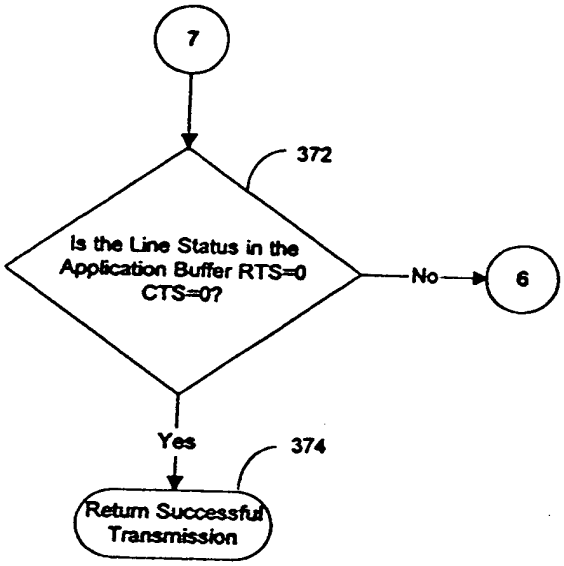
7
372
Is the Line Status in the Application Buffer RTS=0 CTS=0?
No
6
Yes
374
Return Successful Transmission

Figure 7(e)

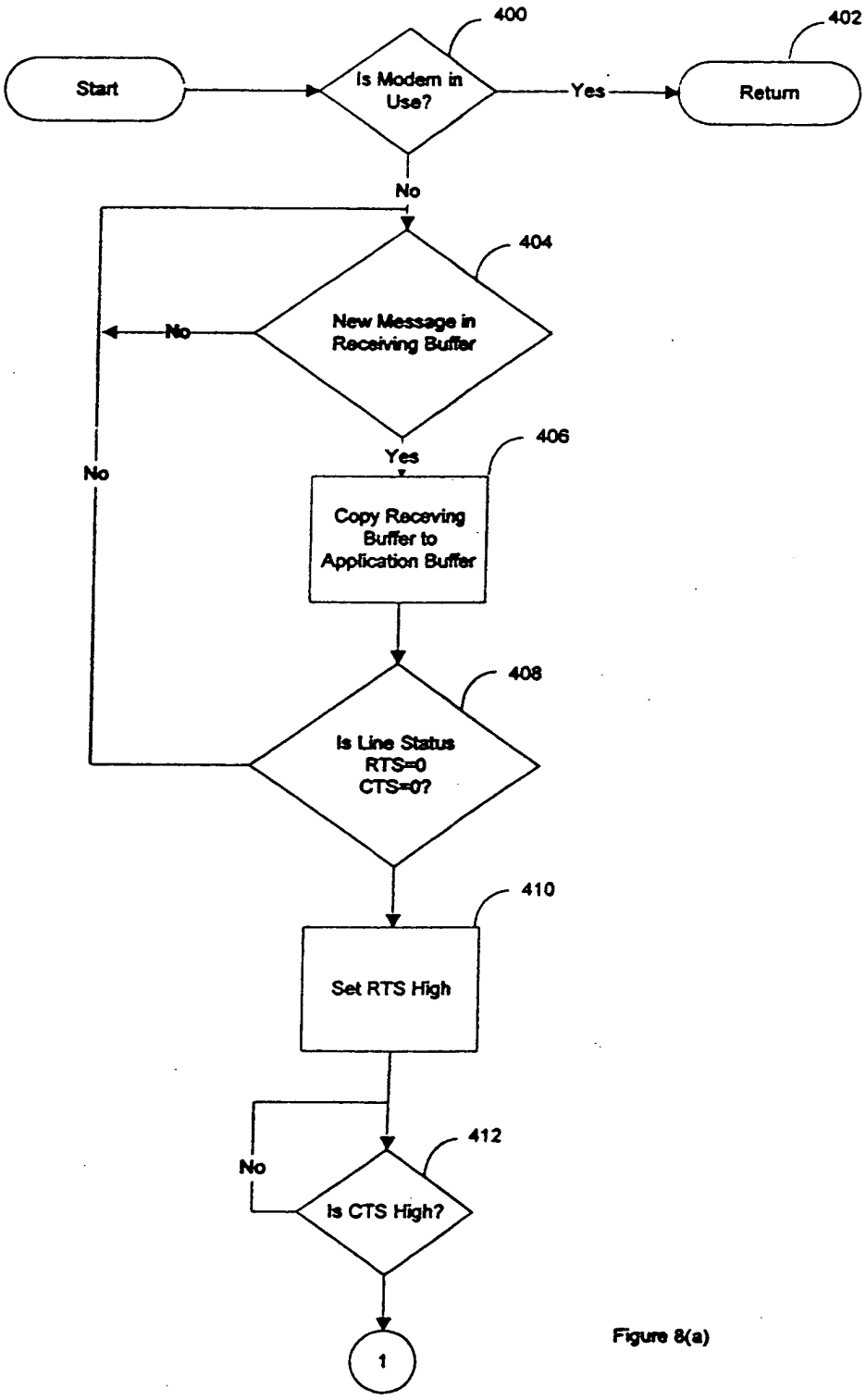
400
402
Start
Is Modem in Use?
Yes
Return
No
404
New Message in Receiving Buffer
No
Yes
406
No
Copy Receving Buffer to Application Buffer
408
Is Line Status RTS=0 CTS=0?
410
Set RTS High
412
No
Is CTS High?
1

Figure 8(a)

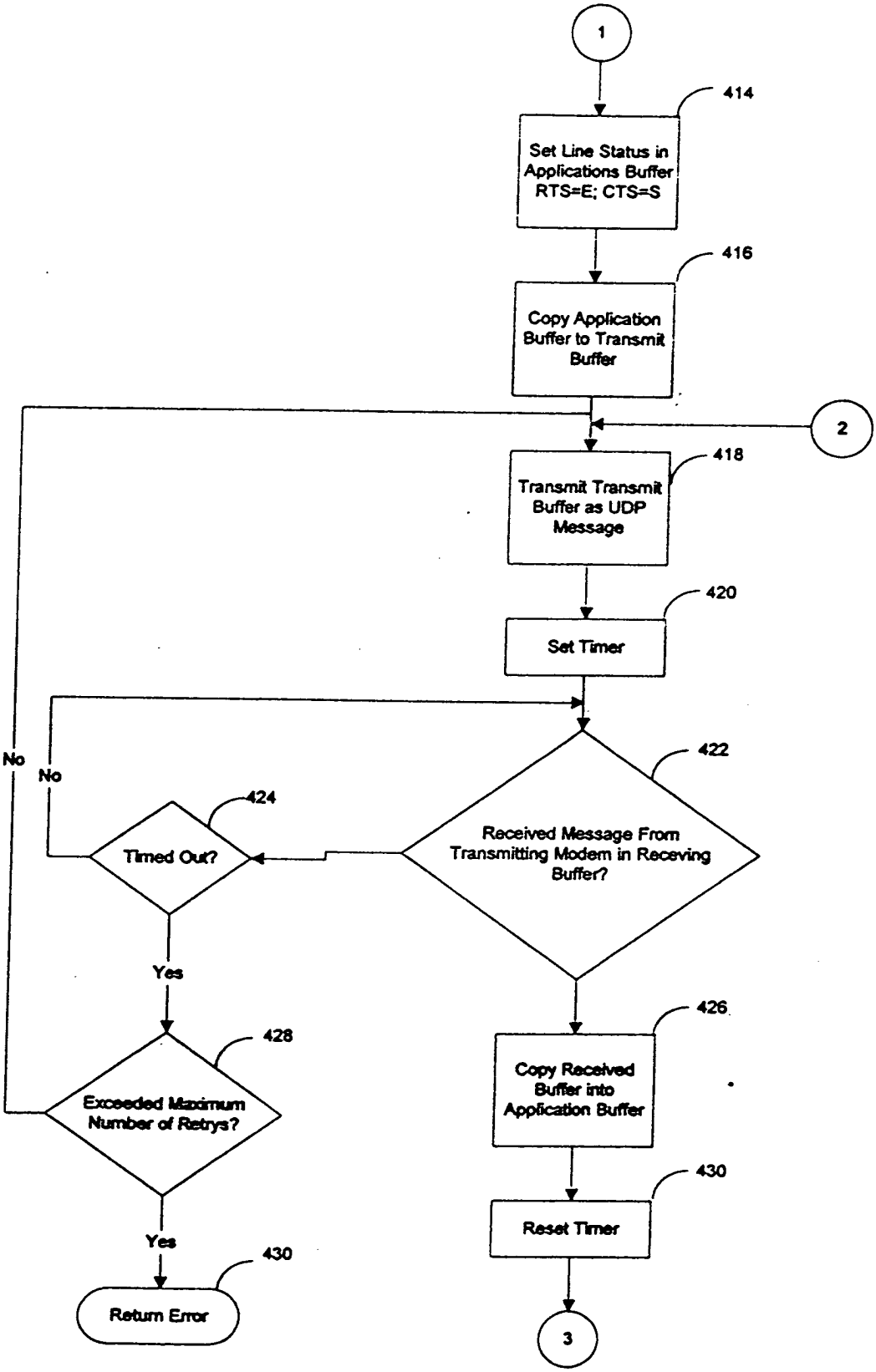
1
414
Set Line Status in Applications Buffer RTS=E; CTS=S
416
Copy Application Buffer to Transmit Buffer
2
418
Transmit Transmit Buffer as UDP Message
420
Set Timer
422
Received Message From Transmitting Modem in Receving Buffer?
No
No
424
Timed Out?
Yes
428
Exceeded Maximum Number of Retrys?
Yes
430
Return Error
426
Copy Received Buffer into Application Buffer
430
Reset Timer
3

Figure 8(b)

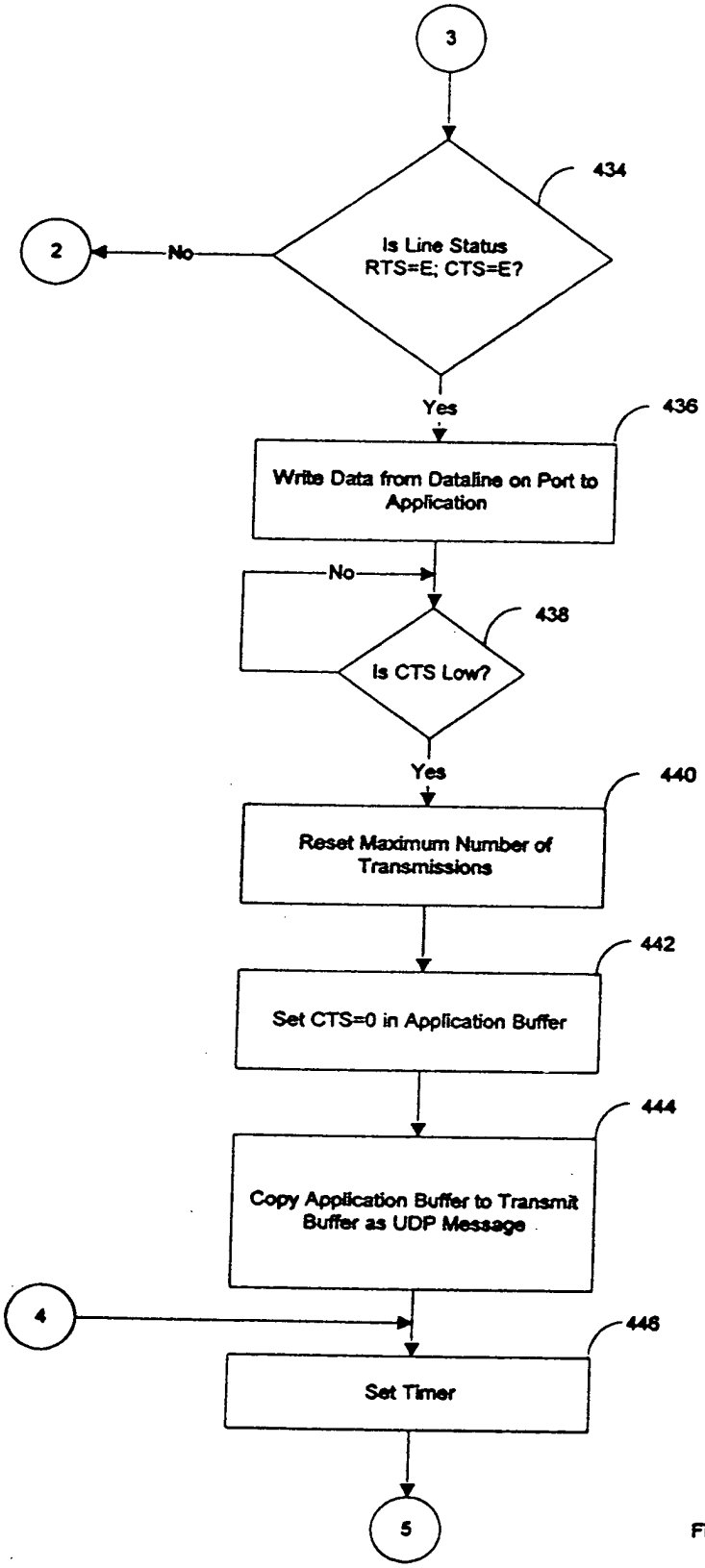
3
434
Is Line Status
RTS=E; CTS=E?
2
No
Yes
436
Write Data from Dataline on Port to
Application
No
438
Is CTS Low?
Yes
440
Reset Maximum Number of
Transmissions
442
Set CTS=0 in Application Buffer
444
Copy Application Buffer to Transmit
Buffer as UDP Message
4
446
Set Timer
5

Figure 8(c)

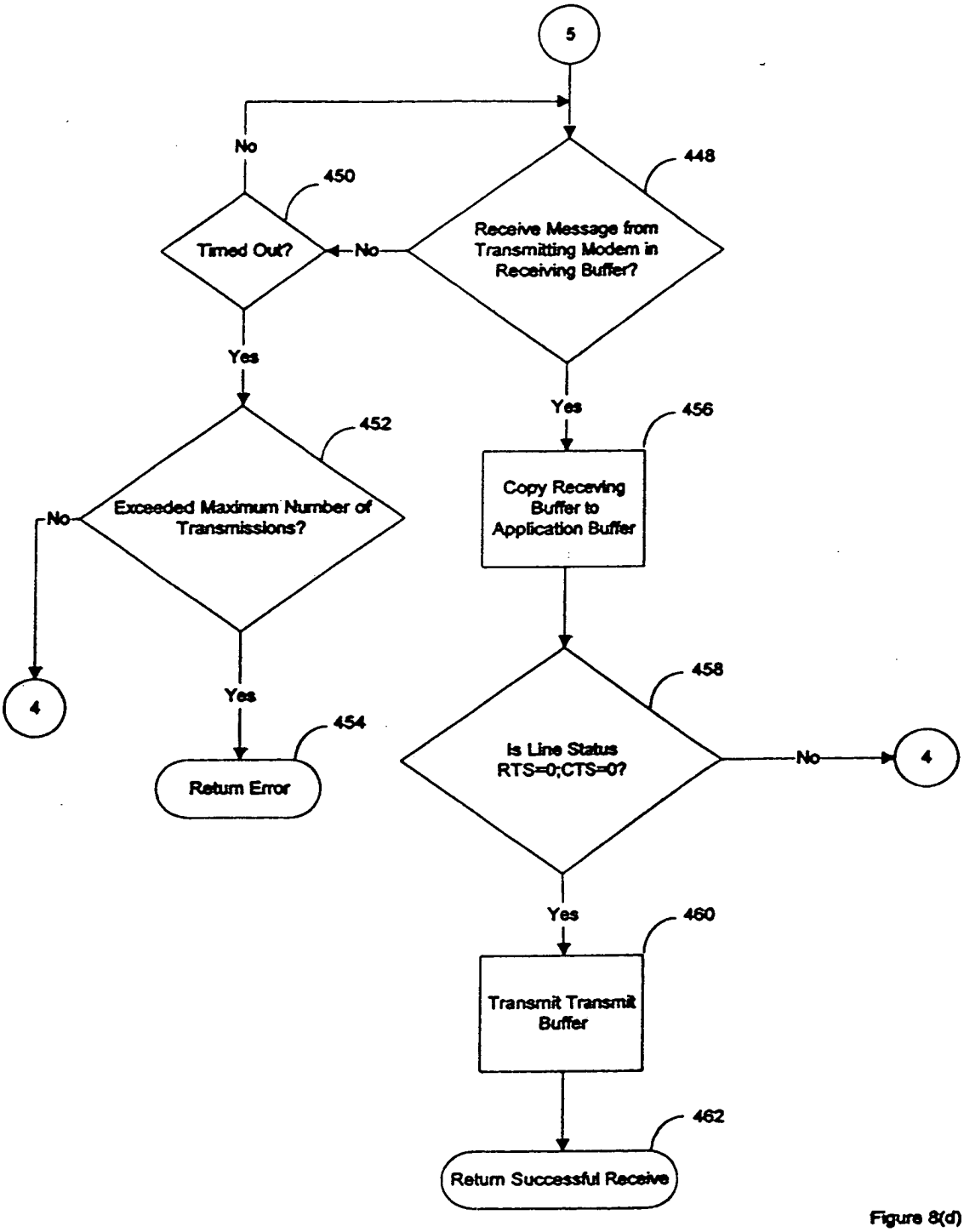
5
No
450
448
Timed Out?
No
Receive Message from Transmitting Modem in Receiving Buffer?
Yes
Yes
452
456
Exceeded Maximum Number of Transmissions?
No
Copy Receving Buffer to Application Buffer
4
Yes
458
454
Is Line Status RTS=0;CTS=0?
No
4
Return Error
Yes
460
Transmit Transmit Buffer
462
Return Successful Receive

Figure 8(d)

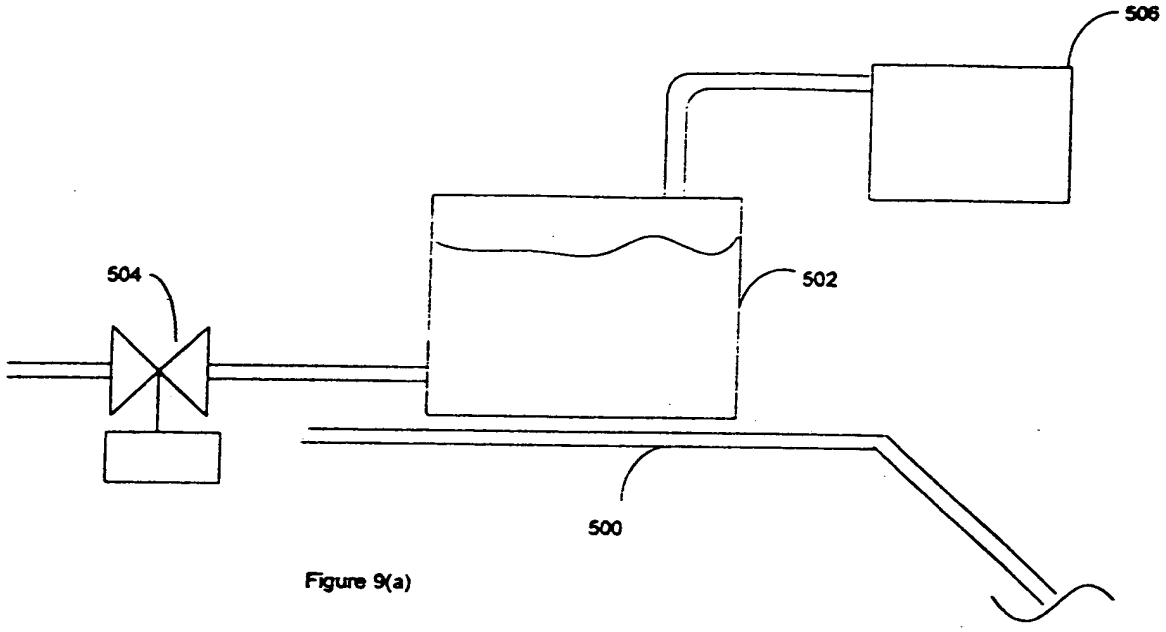

Figure 9(a)

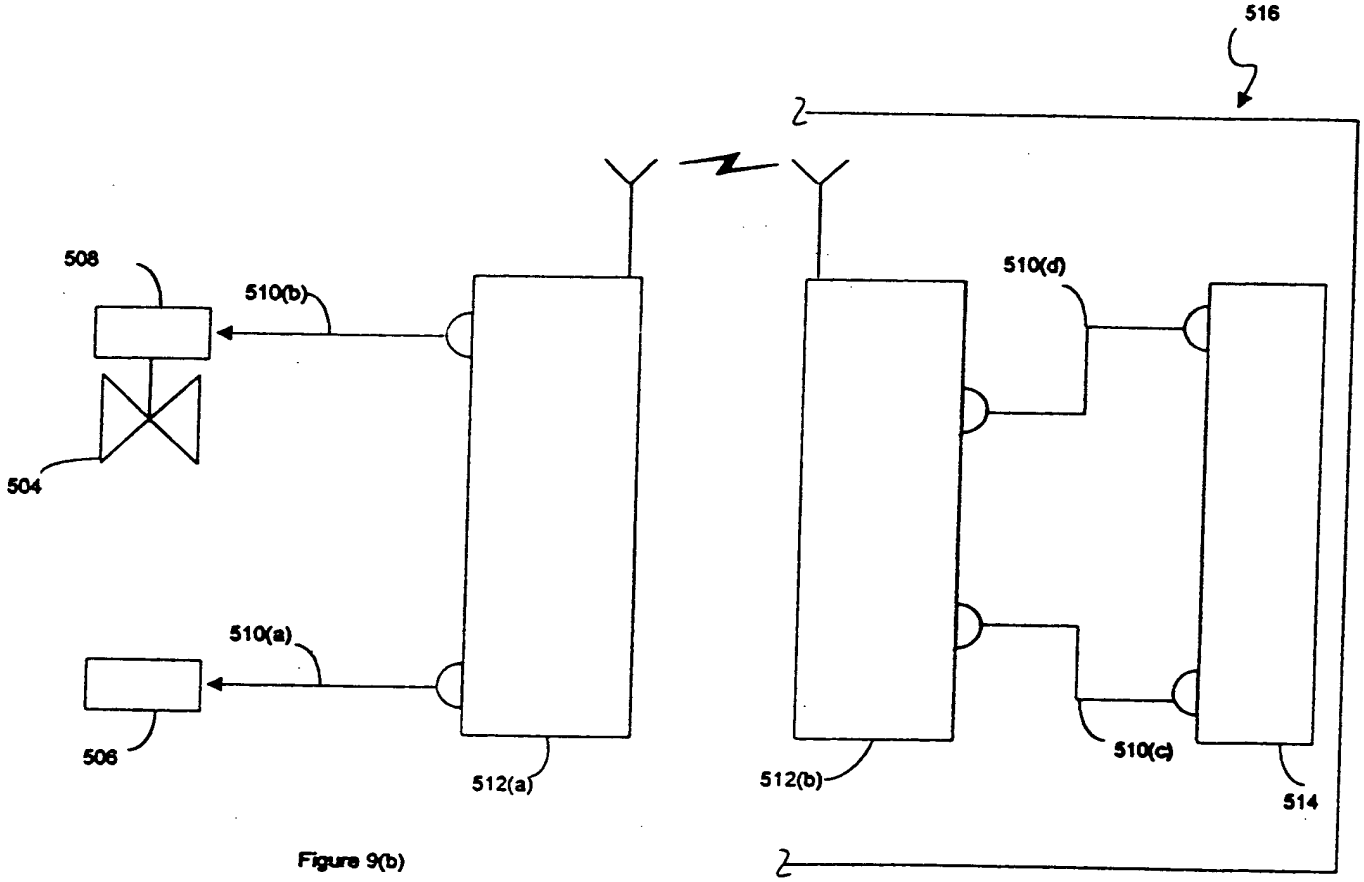

Figure 9(b)